### KENORA, ONTARIO

Although an early settlement existed, Kenora did not really come into existence till the C.P.R. passed through the site and constructed an important yard in 1883. It was then called Rat Portage. A mining boom gave it early colour and many planing mills were set up. The community shyly changed its name in 1905 when it was beginning to become a summer resort at the head of the Lake of the Woods, one of the finest resort areas of North America. In 1923 a large pulp and paper plant was constructed working on power obtained from the channels of the Winnipeg River which carries the lake water northwards. Till 1932 Kenora was isolated by road from the rest of Canada. The Trans-Canada Highway completed in 1944 has altered this. Much traffic by air passes through it to the North.

The municipality contains two large and many small islands. The town itself is on the mainland. Its site consists of rock with a negligible overburden of earth alternating with muskeg. The streets are hilly. A grid street pattern was indiscriminately laid out over a great area of precipice and muskeg, but despite this rigid plan the town has by chance divided itself into four remarkably well isolated neighbourhoods according to the best planning theory, only one of which has become invaded by through traffic. Fringe settlements have occurred where soil conditions were favourable. The suburb of Norman which built up as a result of planing mills is on rock. Summer cottages have been built on the lakeshores, especially those of Coney Island. The hospitals are on Tunnell Island. The flour mill town of Keewatin (population 1,300) lies on the Trans-Canada Highway immediately west of Kenora.

In 1945 the population was 8,200 of whom approximately 1,050 are employed in the railway yards or pulp mill. Approximately 25,000 tourists visited the town in 1945. Owing to rocky conditions 44 per cent. of dwellings were without bath or shower and 35 per cent. had no flush toilets, this despite the fact that average wage earnings were 11 per cent. higher than the Canadian average. The total acreage is immense, 6,200, of which 1,800 acres are water.

#### **Problems**

There is an acute shortage of residential lots and development for dense residential use of small isolated pieces of rocky land, impossible to serve with sewers and water, is continuing.

The established settlement of Norman has no sewers, and only water supply in summer and is economically impossible to serve with either.

Sewage outfalls untreated into Kenora Bay and Laurenson's Creek, the flow in which is reversed by a strong wind off the lake.

Two schools are obsolete.

Trans-Canada highway tourists and other traffic passes

along the main residential and main commercial streets causing a bottleneck in the summer on Main Street, which has double diagonal parking.

The junction of the Trans-Canada highway and the subway under the railway is dangerous.

There is an acute lack of off street parking.

The main sewer outfalls raw at the main tourist dock.

The centre of the town has turned an unsightly back on its greatest recreational asset, the Lake of the Woods, nor has it given its central area any character suitable to an important resort town.

Central Park is boggy.

There is no land served with public utilities for attracting industry.

The town acquired cheaply an old Y.M.C.A. building of non-fireproof construction, intending to use it as a town hall.

Planes landing in the bay cause danger to boats and are very noisy to the hospital and citizens.

There is a lack of community facilities and there is little to attract tourists within the town.

The bathing facilities at Coney Island need improving. An Indian reserve in the town causes abuses.

One street in a residential neighbourhood is overloaded.

There is a schism in public opinion mainly between industrial worker and merchant as to the desirability of attracting tourists.

#### Plans

Plans were made for an increased population up to 10,000 within 20 years. Plans include a request for the naming of a Planning Area to include the adjacent town of Keewatin.

## Principal Regulations and Encouragements of Private Improvements

To extend public services to the north-east to an area of sandy soil in order to serve an existing settlement and encourage development for residential purposes in a suitable area.

To enact a Zoning By-Law restricting all land beyond possible extension of services, including Norman, to one house per ¾ acre. To designate certain lands suitable for industrial use.

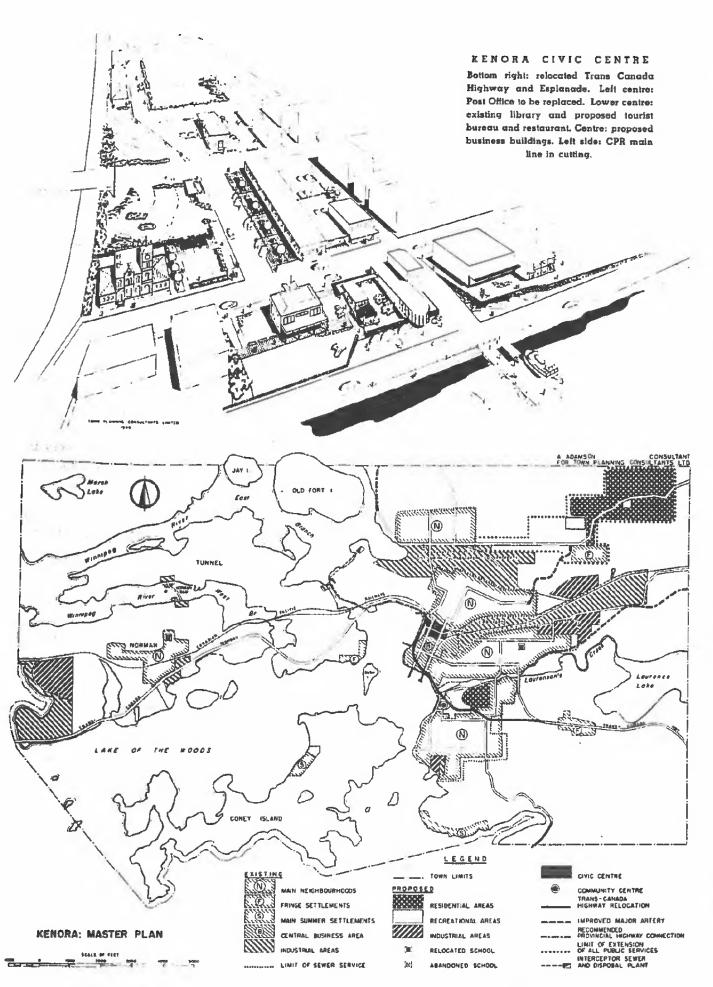
To develop according to a planned layout, town owned property adjacent to a new park site for sale for residential purposes.

To encourage the development of better private ferry service to Coney Island.

#### Principal Public Improvements

To construct a sewage disposal plant.

To construct a trunk interceptor with pumps to carry



sewage from existing outfalls to the disposal plant, or, if assisted by government to construct a modern separate sewerage system.

To abandon the school at Norman and build one new school and to co-operate with the town of Keewatin in enlarging the High School. To enlarge the High School playfield.

To co-operate with Government in the relocation of the Trans-Canada and other highways entering the town.

To construct an esplanade behind Main Street along this highway.

To remodel one railway subway and co-operate with government in the construction of a bridge over the railway outside the town limits.

To build a new town dock.

To extend and improve certain streets.

To develop a new park on town owned property.

To develop town leased property outside the town for recreational purposes.

To acquire property and develop a Civic Centre using a town owned building as town hall.

To acquire land and maintain public parking areas.

To construct a Community Centre and Tourist Pavilion on town owned property on the Lake of the Woods.

To drain the Central Park area.

To improve rough park land on Coney Island for recreational purposes.

To co-operate with the Government in the development of Rabbit Lake for local citizens' and tourists' recreation.

To improve the water supply to the hospital on Tunnell Island.

## TERRACE BAY, ONTARIO

In the centre of the bush land, 20 miles east of Schreiber, Ontario, a planned community is now under construction. Its function will be merely residential, to house the employees of the Longlac Pulp and Paper Mill that will be situated about ¾ miles north.

As a basis for planning Terrace Bay, it was determined that:

- All land and physical equipment of the town will be owned and operated by the Company, and the final administration of the town decided by the Company at a later stage.
- Favourable soil conditions exist in the site selected, and its topography is suitable for economical public utilities.
- 3. The maximum size necessary and expected is a town of 1,000 families, of which:
  - (a) A population of between 300 and 400 families, or a population of upwards of 1,200 people will have to be provided for initially.
  - (b) A final population of between 800 and 1,000 families or a population of between 3,500 and 4,500 people may be attracted to the town by the employment offered by the company.
  - (c) A larger population than 5,000 may develop due to the location of additional plants offering employment.
- The greater portion of the population will be married and most of these will have children.
- Housing and all community facilities will be developed and extended in accordance with the demands of the population growth.
- The focal points, such as commercial and recreational areas will be so located as to serve the town at equal distances from the extreme points of the residential areas and railway station.

#### Factors Determining the Town Pattern

Physical factors determining the town plan are:

- The existence of the railway forming a northern boundary.
- 2. The existence of a marshland forming an eastern boundary.
- 3. The existence of an escarpment forming a southern boundary.
- 4. The existence of the river forming a western boundary.
- The existence of the three large rock outcroppings in the centre of this area.
- The position of the Trans-Canada Highway to be constructed by the Department of Highways (Ontario) along the escarpment bending north-east to the railway.
- A heavy snow fall with low winter temperatures, and in the summer, the fog on the southern slope leading down to Lake Superior.

In the preparation of the plan, the following data were assumed as guidance:

#### Economic Base

- (i) Estimated average yearly income for 340 families (initial pop.) \$ 1,843 Estimated average yearly income for 1,000 families (final pop.) \$ 1,843
- (ii) Total purchasing power of 340
  families \$314.500
  Total purchasing power of 1,000
  families \$925,000
- (iii) Rental Subsidy:

  Total cost of building, land and improvements per dwelling unit \$ 6,600

Operating cost and amortization		
per year - 8%	\$	525
Required rent per month	\$	44
Average rent-paying capacity per		
month	\$	30
Monthly subsidy required	\$	14
Total subsidy per year for 340		
families	\$57	,120

#### The Town Pattern

The three large rock outcroppings and the highway divide the town into 3 well defined areas. On the east and to the north of the highway are 4 areas of about 44 acres; on the west, a residential area of about 21 acres; and to the south of the highway 3 residential areas comprising about 40 acres. These acreages are for lot area only.

The Trans-Canada Highway crosses the railway from the north to form the eastern boundary of the town, turning west to bisect the town into north and south residential areas, running approximately parallel to the railway. About ¾ of development is "inside", or north of the highway. A subway under the highway to the south-west of the rock, connects southern with northern residential areas to provide a maximum of safety for school children.

The highway gives limited access to the residential areas within the town, and branches to the railway station and factory.

Connecting roads within the residential areas lead to all parts of the town.

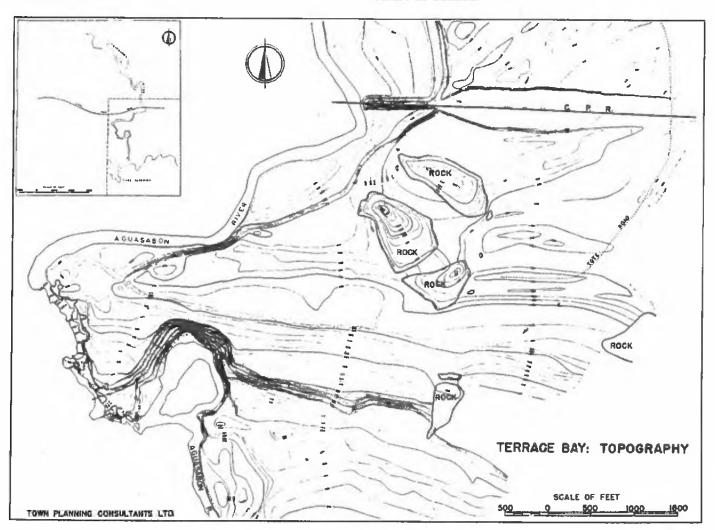
The shopping centre is located north of the highway, slightly to the west of the bend. The shop fronts face south; the main shopping street is off the highway to avoid impeding through traffic and to provide quieter shopping facilities.

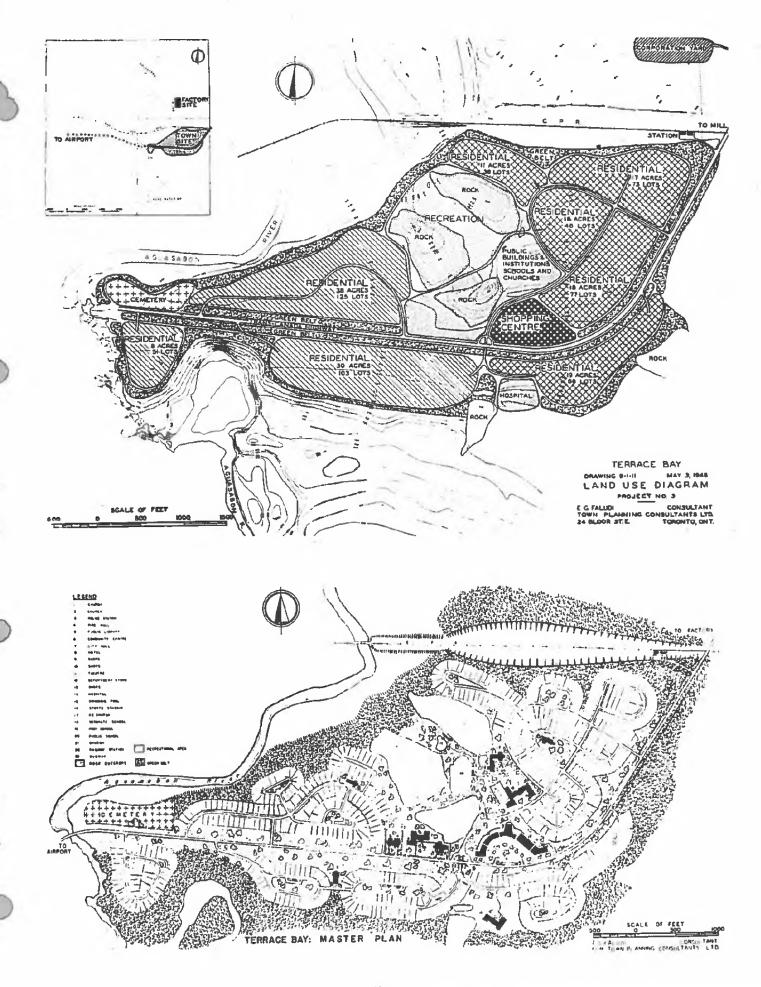
The school and church area is located in the free spaces between the rocks, is convenient to all parts of the town, and is large enough to serve the entire town.

The main area for recreational purposes is also located between the rocks, in combination with the school and church area.

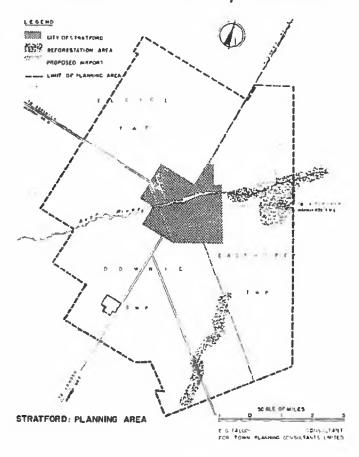
All residential areas are separated from the highway by broad green belts and are connected with it by access roads in order to avoid the use of the highway for residential purposes. A green belt is also provided between the northern residential areas and the railway.

The experience in operating this newly planned town will serve to determine a number of factors that have to be considered in planning new communities in the future in Canada.





## STRATFORD, ONTARIO



A planning area of 60 square miles in proposed for the control of undestrable development outside the city limit and for the encouragement of regional projects such as an airport, referestation and regional parks.

Settlement first occurred on the banks of the Avon River about 1820 and a small village grew into a thriving industrial centre. While most Ontario cities have sacrificed their water fronts to industry and commerce, a few far-sighted citizens of growing Stratford formed a Parks Board in 1904 and purchased the land on both sides of the river. They later engaged landscape architects from Montreal and New York and constructed one of the finest small park systems in North America along it. The Grand Trunk Hailway endeavoured to build a railway along the river bank in 1911, but was successfully resisted by the Parks Board. By 1920 they acquired practically all the land they now own, and have incorporated the ruins of the original water mill in the park scheme.

Stratford is in the midst of a production network in the peninsula of south-western Ontario where diversified manufacturing trades are well integrated. Stratford is the divisional point of the C.N.R. and of Department of Provincial Highways.

Within a 160 mile radius of Stratford lies about onefifth of Canada's entire population, representing the Dominion's highest average earnings per employee per annum. It is linked by railway lines with the main transportation routes.

Stratford has many diversified trades; wood and light metal work; furniture, textile and clothing manufacturing; food production; foundry and machine works; and railway shops.

In 1945 the population of Stratford was 18,000 contained in 2,385 acres, of which 800 acres are undeveloped. 5,400 are employed in industry, most of which are expanding. 35% of the population is between the ages of 20 and 44. 9,39% of the city is in park lands.

#### **Problems**

15 acres of the residential area is blighted.

104 acres of the residential area is declining.

Despite construction by Housing Enterprises of Canada Ltd., over 1,000 housing units are still urgently required to eleviate the housing shortage.

The fortunate conjunction at Stratford of five old surveys has caused the convergence of five main concession roads in the centre of the city making Stratford a regional hub. This has now resulted in traffic congestion and presents parking problems.

Cultural facilities have not been developed in relation to its size.

Existing school buildings are inadequate.

#### Plans

Plans were made for an expected population of 25,000 by 1976 and included the establishment of a Planning Area in accordance with the Planning Act of 1946 to prevent a haphazard growth of the city and to control undesirable development outside the city limits.

Principal Regulations and Encouragements of Private Improvements

To adopt a Zoning By-Law.

To reserve and develop 74 acres of land around future factories and industrial areas for recreational and buffer purposes, and to continue the development of presently owned park properties for recreational purposes.

To restrict within the city limits, 715 acres of vacant land for farm or residential uses on a minimum of one acre to a house.

To restrict approximately 350 acres of vacant land to house the anticipated population on the basis of a density of four houses per acre and to restrict 15 acres of blighted residential areas for redevelopment under the National Housing Act.

To restrict 370 acres of vacant land and 105 acres of declining residential areas for industrial purposes.

To restrict 3,750 feet of additional frontage for neighbourhood commercial centres and 9,600 feet of frontage along main routes for light manufacturing.

#### Principal Public Improvements

To co-operate with the government in the construction of a by-pass highway for through traffic in the south-east.

To designate and widen by-pass routes for industrial

To eliminate traffic jogs and construct four underpasses.

To provide five publically owned parking lots.

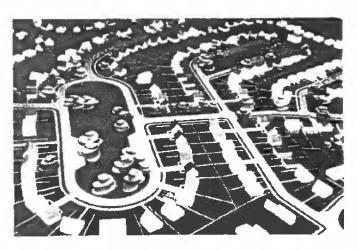
To construct certain new streets in areas of new residential development designed on the neighbourhood pattern.

To co-operate with industry and railways for the elimination of the smoke nuisance.

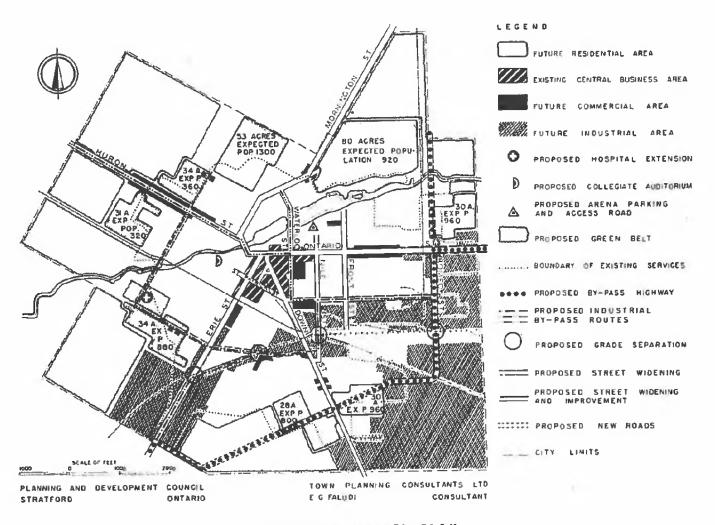
To acquire 200 acres of land for the development of an airport.

To enlarge existing schools to accommodate expected increase in population. No new buildings are required.

To construct an addition to the Vocational School to serve as a Cultural Centre and contain an auditorium holding 1,200 people.



Rental Housing Project Part of the Master Plan in implementation (built by Housing Enterprises Limited.)



STRATFORD MASTER PLAN

## TOWN PLANNING AT WORK

By DONALD B. STRUDLEY

THIS is the story, not of the Stratford Master Plan, but of the growth, over a several year period, of the "Planning" idea in Stratford and the general acceptance by the whole community of the fact that "Planning" is important to all of them, and that much as we might disagree on certain details, we must within a reasonable period of time get our planning under way, discuss and compromise on the points of disagreement, and then get on with the job of implementing the plans.

Although it was not fully realized at the time, the first practical steps towards Planning were taken by the 1943 City Council when they appointed a sub-committee on "Post-War Works". The thought was to survey the need of civic improvements, particularly as related to the amount of labour each might furnish, and to list the chief items with some degree of priority so that engineering studies and details could be undertaken and a good backlog of work be made ready for an expected post-war depression. This committee did a very good job and made a report towards the end of 1943 that was valuable and constructive.

About the same time, or in early 1944, a number of citizens had become aware of the great development first in Britain and United States, and then in Canada of "Community Planning". The emphasis on this subject in the Curtis Report on Housing and in the National Housing Act, 1944, all helped, and the fact that by that time it was apparent that Stratford must be prepared for substantial growth in the immediate post-war period lent urgency to the discussions. To this group of citizens the "make work" approach was entirely too negative and it seemed that we should get down to brass tacks, discuss what kind of city we wanted and could reasonably hope to grow into, and what our physical requirements would be if we were going to develop that way. The upshot was that Mr. Geo. Mooney, the then Executive Director of the Canadian Federation of Mayors and Municipalities, and an early apostle of Planning, was invited to address a dinner meeting organized by the Stratford Rotary Club and to which representatives of all local official and semi-official bodies were invited, such as the City and County Councils, Board of Education, Public Utility Commission, Industrial Commission, Parks Board, Board of Trade, Trades & Labour Council, other service clubs, etc. Mr. Mooney did a splendid job of outlining the objectives and benefits of Planning but warned us that experience showed that a Plan to be successful must be the result of careful working and thinking on the part of a great many local citizens, and that, necessary as an outside Consultant might be, the Plan when finished, if we expected it to be adopted, should be the citizens' own plan, and not solely that of an outside Consultant.

Resulting from this meeting was a decision, endorsed by the City Council, to set up a Stratford Planning & Development Council, representative of all organizations in the city, official or otherwise, who had an interest in the community. This Council was organized in early 1944 and elected an executive of seven members, who undertook the development of a comprehensive Planning programme. Sub-committees were set up to consider questions of Population and Retail Trade, Employment and Industry, Community Objectives (broken down into sub-committees on Housing, Health and Hospitalization, Schools and Recreation, and Airport), Zoning and Land Use, Finance and Legislation, and Public Information. Forty or fifty citizens representing a very wide cross-section of the community were interested in the work of these committees and sub-committees and their studies during 1944 resulted in the compilation of much useful and needed data and considerably furthered the interests of this group, and of the Community, in the whole project. By Fall of 1944 most of the committees had prepared a preliminary report outlining the field of their studies, and in some cases, had presented well documented programmes for further action. The Subcommittee on Health and Hospitalization, for instance, had carefully reviewed the problem of integrating all hospital facilities including General, Isolation and Chronic, and developing expanded facilities to meet the calculated future needs. The Department of Health and the Minister of Health had been in on the discussions and had approved them in principle, and the committee reported that they needed an appropriation to engage architects to proceed with more detail planning before any further progress could be made.

In January, 1945, the Planning and Development Council asked the City Council to approve a budget provision of \$7,500 to enable them to start an architectural firm on Hospital Plans and to cover other contemplated expenses and this was done. They asked also, and City Council agreed, that as a temporary measure no City-owned lands should be sold without obtaining a report on them from the Planning & Development Council. This simple step has proved of immense importance and has been the means in a number of cases of avoiding situations "going wrong" during the process of planning.

By the middle of 1945 it was apparent that we also needed expert Planning Consultants to give guidance and help in our whole Planning Programme and after discussions with a number of firms doing this work, we engaged Town Planning Consultants Ltd., of whom Dr. E. G. Faludi is Managing Director, to schedule and supervise the planning work with the idea that we would have our Zoning By-law and Master Plan proposals ready

for presentation to the public by early summer of 1946. Under Dr. Faludi's direction a Planning Office and full time staff were set up in the City Hali and a more intensive programme of work undertaken. The previous committees had largely completed their work and submitted reports and the Planning and Development Council was then re-constituted as two major committees—a Planning and a Zoning Committee each of which met every two weeks through the winter of 1945-46.

One of the first tangible results from the new Planning Office set up was in the field of Housing. Housing Enterprises of Canada Ltd. had just been set up to undertake large scale rental housing developments. Stratford's housing situation, particularly for returning veterans, was desperate, and we wanted to get action at the earliest possible date. By putting the whole Planning Office Staff on the job for two weeks in November, 1945, we completed a detail factual study of the actual housing situation of the some 500 veterans who had returned home at that date, and by adding to this the very complete information previously prepared by the Committee on Employment and Industry, we were able to complete a very useful report for Housing Enterprises, proving beyond doubt that we had a need of up to 1,000 housing units, and had industrial employment at wage levels that enabled a very large proportion of the total population to afford the rents Housing Enterprises contemplated.

On the basis of this report we obtained an almost immediate favourable decision. A site was chosen to fit in with our larger plans and Town Planning Consultants Ltd., in conjunction with the Stratford Planning Office, undertook the detail site Planning. This development of 108 immediate houses on a site planned for over 300 eventual houses was one of the first in Canada to actually get into construction, and is now well advanced, and is considered by Housing Enterprises to be one of the best and soundest of any of their developments to date.

In January, 1946, we again asked and obtained City Council approval of our budget of \$8,000 to complete work on the Master Plan and Zoning By-law, cover the expense of having them implemented, and to cover the cost of a public exhibition in June to present the plans to the public.

The Planning proceeded about on schedule and in June a very impressive Planning Exhibition was opened by Premier Drew and continued for ten days. During that time the public admissions represented 25 per cent. of the population of the community which we felt indicated a very broad interest on the part of the citizens. During the Exhibition also three public meetings were held to discuss the Zoning By-law proposals in the three sections into which the City had been divided. The Zoning Proposals in the form of maps and Tables of Permissible Uses had been well publicized in the newspaper and were, of course, displayed in the Exhibition and the public were invited to question or criticize them. The meetings were well attended, and the suggestions

and criticisms were almost all on the basis that this or that proposal was unwise for the community, rather than that it would hurt the individual concerned. Out of these meetings a considerable number of changes were made in the proposals, and a great deal accomplished in explaining the proposals to the people who were going to be directly affected.

During the Spring of 1946 the Planning Act, 1946, was passed by the Ontario Legislature and this was, of course, reflected in our proposals. We contemplate that the Stratford Planning and Development Council will be reconstituted as a Planning Board under this Act and that it will carry on to administer the Plan. If the Planning Act had been in effect when we started in 1943, we would no doubt have used it and this would have given better and more efficient direction to our efforts. A good many of us feel, however, that the groping we have done over several years to arrive at our present plans has not all been wasted and that out of this very democratic approach we have interested more citizens in the planning process and, if so, this will probably pay future dividends as the plans are implemented.

Our present position is this:

The City have officially asked the Minister of Planning and Development to set up a Planning Area for Stratford. The area recommended by the Planning and Development Council includes parts of four adjacent Townships, two of which have definitely agreed to come in, and we hope shortly that the problems in respect to the other two Townships will be resolved.

When the Planning Area is settled a Planning Board will be set up representing the several municipalities in the Area.

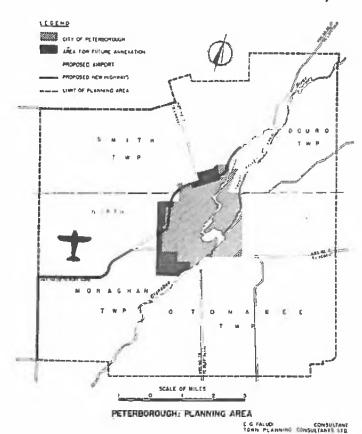
A Zoning By-law is practically ready for presentation to City Council and has been widely discussed, to settle controversial points, before it is presented.

A Master Plan covering Planning Requirements for an estimated 30 year period ahead is ready for final approval by the new Planning Board before presentation to City Council.

A number of projects recommended as urgent in the Master Plan are well advanced. For instance, Marani & Morris in Toronto have completed preliminary hospital plans and the problem of settling the financing arrangements is well along; J. D. Kyles in Hamilton has plans well advanced for a Secondary School addition, including a Civic Auditorium and these plans are being discussed with the Department of Education; almost two hundred housing units, practically all in carefully planned neighbourhood developments are being erected by Housing Enterprises, Wartime Housing and private capital and will be completed this year.

All in all we have high hopes in Stratford that the community will be able to finalize and accept a very constructive long range plan, that will help immeasurably over the years as we gradually grow into the city that we want to be.

## PETERBOROUGH, ONTARIO



A planning area of about 84.3 square miles in a radius of about 6 miles of the city limit is proposed for the purpose of preventing haphazard growth of the city and to encourage desirable development outside the city limits.

Settlement first occurred on the banks of the Otonabee River about 1825 and a small village gradually grew into a logging centre. The river provided power to the early mills and its banks became taken over with small industries serving the increasing number of local settlers.

The railways came to Peterborough in the early sixties from five directions, one main line running through the centre of the town and another along the river. Later industries settled by these lines in different parts of the town. The three largest being U.S. subsidiaries making electrical products, cereals, clocks and dairy machinery.

The river bank has been given over to industry and hydro-electric power and its waters contaminated. Very little use has been made of a potentially charming small lake through which it passes, nor of a pleasant little creek which flows ignored through the city.

Recreationally the town has not equipped itself too well but it is fortunate in being near to an important recreational and sports region to the north.

The city despite certain disadvantages due to ill considered development in the past has a curiously old world wealthy conservative air for an industrial city and considerable funds are in hand for the construction of public buildings.

In 1945 the population was 32,379 contained on 924 acres. 8500 are employed in industrial plants most of which are expanding. 40% of the population is between the ages of 20 and 44. 7.8% of the area is park.

#### **Problems**

27.2% of the residential area can be considered sound. If preventive measures are not taken 38.5% is in danger of deteriorating and 34.3% is already declining or blighted.

There is a shortage of approximately 1300 dwelling units of which 1,000 need be for rent.

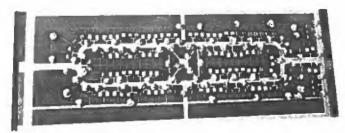
The local needs for playgrounds are inadequately met.

All traffic coming into Peterborough passes down its main street causing danger and congestion.

Only 15% of the streets in Peterborough are paved.

There are 76 level crossings, 18 of which are on major streets and main line railways and one track runs down the centre of an important downtown street.

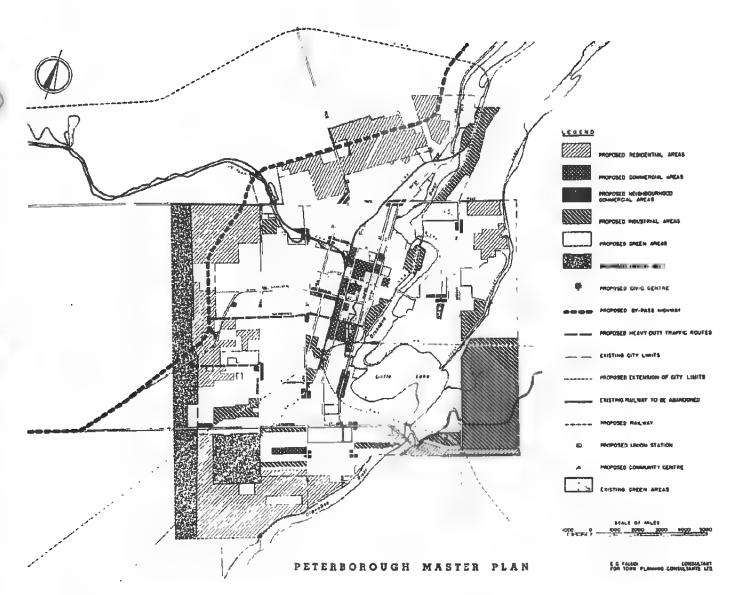
There is an acute lack of parking space in the business area. Both CPR and CNR stations are obsolete. There are no facilities for air transportation. There is no building adequate for community cultural activities. There is a lack of business frontage available in the central area.



Rental Housing Project, planned and developed by Housing Enterprises of Canada Limited.



Civic Centre: The group of white buildings on the left contains extension of public library, auditorium and city hall.



#### Plans

Plans were made for an expected population increase up to 50,000. In this increase is an anticipated immigration of 9,000 people over and above that by natural increase. Plans include the naming of a Planning Area of 84 square miles under Provincial legislation to control fringe development, and the annexation of 775 acres to the city proper with the purpose of housing an anticipated increase in population.

### Principal Regulations of Private Improvements

To adopt a Zoning By-Law.

To designate 775 acres of existing vacant land to residential use for the increased future population; to redevelop with government assistance, approximately 40 acres for residential purposes upon a neighbourhood street pattern; to acquire and develop 99 acres of land for recreation; to restrict 10 acres to a green belt in order to isolate industries; to restrict 398 acres of vacant land to form a farm belt with a density of one house per acre; to restrict 10,000 feet of frontage for commercial purposes in new residential neighbourhoods; to restrict 455 acres of vacant land and 25 acres of declining residential property for industrial use.

#### Principal Public Improvements

To participate with government in the diversion of Highway No. 28 to by-pass the business district.

To improve, pave, widen certain streets and eliminate traffic jogs and construct a traffic circle.

To surface all residential streets.

To plan a new street system on the neighbourhood plan in areas set aside for the residence of the anticipated population increase.

To construct a city hall, an extension of the public library and a community building to form a civic centre.

To remove the present market building and rearrange the market square providing parking area.

To participate with the CNR in the removal of tracks from Bethune Street, joining the existing CPR tracks on the east shore of the Otonabee River. To erect a Union Station on the site of the present CPR station.

To participate in the development of a bus terminal adjacent to this station. To provide parking space behind commercial frontages of certain blighted blocks. To participate in the development of a commercial airport and a landing field.

## ETOBICOKE, ONTARIO

Etobicoke Township, part of the metropolitan area of Toronto, is situated along the western boundary of the city. It was incorporated in 1850 with a population of 2,904 and its development falls into five stages. The first stage ended about 1780 and was the age of river travel and fur trade, the Humber River being the principal means of transportation. During the second period from 1780 to 1840, land settlement, water power exploitation and the milling industry became significant. The third period, from 1840 to 1911 was the age of steam power and railway transportation. The following era from 1911 to 1939 was based on residential development made possible by the automobile, rapid transit, highways and economical transportation. The final period from 1939 to 1945 marked the beginning of industrial developments which stemmed from accelerated wartime demands for industrial products.

In 1945 the area of the township was 27,312 acres of which 3,892 acres were urbanized. The total population is 21,402 of which 89 per cent. is urban.

#### **Problems**

To determine the future urban area and within this to determine the most desirable locations for residence and industry.

To determine the areas to be used as green belt villages within the agricultural area.

To locate necessary schools to serve the anticipated population.

Some of the provincial highways and township roads are not adequate to carry the volume of traffic to which they are subject.

#### Plans

Plans were made for an anticipated population increase of 10,000 during the planning period of 20 years. Plans call for an application to the Department of Planning and Development to declare the township a subsidiary Planning Area within the Toronto Planning Area.

To divide the township into an urban area of 14,045 acres and a farm area of 13,267 acres.

#### Principal Regulations and Encouragements of Private Improvements Within the Urban Area

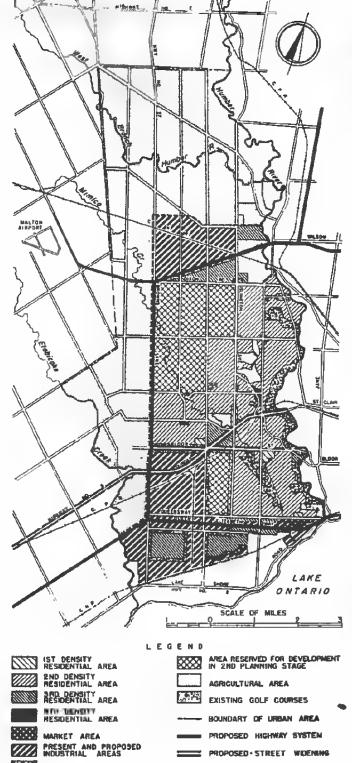
To adopt a zoning by-law.

To reserve and develop 590 acres of land for parks and playgrounds.

To reserve 5.765 acres of vacant land for future residential use with 6,000 feet of frontage for neighbourhood commercial centres in the new residential areas.

To reserve 3,000 acres adjacent to railways and highways for future industrial sites.

To reserve 3,000 acres within the urban area for future development in the second planning stage. During the present stage, this area would be devoted to farms and market gardens.



# PROPOSED PARK SYSTEM TOWNSHIP, BOUNDARY

#### ETOBICOKE TOWNSHIP MASTER PLAN

E G FALUDI CONSULTANT FOR TOWN PLANNING CONSULTANTS LIM

#### Principal Public Improvements

To participate with the government in the construction of certain highways and the widening of other main roads. To reserve property for three new public schools in the future residential areas.

## deep river: new canadian town

Since the war several nations, notably Britain, have studied the problem of building wholly new towns. The creation of a village as a single building operation has often been achieved in the past for military, colonization or industrial purposes. But so far as we know, the only example of a Canadian post-war settlement created at one stroke by a national agency is Deep River, Ontario. The planning experience gained there may well interest our readers.

Deep River is a special case; it was built in a hurry to accommodate in their off-duty hours the research and operational staffs of the federal government's nuclear fission establishment near Chalk River. It is a purely residential colony that had to be planted in the wilderness. Its inhabitants are largely people with urban backgrounds and a high degree of education. The welfare and stability of the new community had to be thought of, not only for its own sake, but because unrest in this place could directly affect the national security. In a sense, the town of Deep River is a social laboratory just as Chalk River is a physical one.

The Site

The place where atomic workers would live was determined within limits by the choice of a site for the Plant itself. The workers would want to live near it, but not too near. The research establishment had to be put in relatively unoccupied territory, yet many of the workers were used to a full range of urban services and amenities. Many of them wanted to keep connections with eastern universities from which they came. No one was sure how many workers might ultimately have to be accommodated, so plenty of room for expansion was needed.

The Plant was located up the Ottawa River, more or less 100 miles northwest of the capital. A few miles from the Plant there was found an old Indian campsite on the south bank of the river. It was surrounded by shelving, tree-covered slopes-making a rough half-bowl opening north-eastward to the river and the Laurentian mountains beyond. The land was dry, except at its east and west limits, where rock outcroppings inter-Tupted drainage. The only users were a few summer cottagers, subsistence farmers and squatters. About 15 square miles were acquired between the river and a provincial highway that parallels it less than a mile away. The adjoining lands were largely in public hands -a forest reserve upstream and a military area downstream. Across the river were private timber, fishing and hunting preserves. The frontage on the highway was in private hands, and remains so.

(For aid in preparing these notes the editor wishes to thank the following: the President of the National Research Council, Br. C. J. Mackenzie; the Vice-President and Director of the Atomic Energy Project, Dr. David Keys; the planning consultant, Prof. John Bland; and the architect in charge, Mr. Peter Dobush.)

The People

Deep River is not an incorporated town. It was managed, up to a year ago, jointly by a wartime defence corporation and the National Research Council. At the end of 1946 the Research Council assumed all aspects of the town's administration. The town was designed in consultation with Professor John Bland of McGill University, and built by contractors with the Crown agencies.

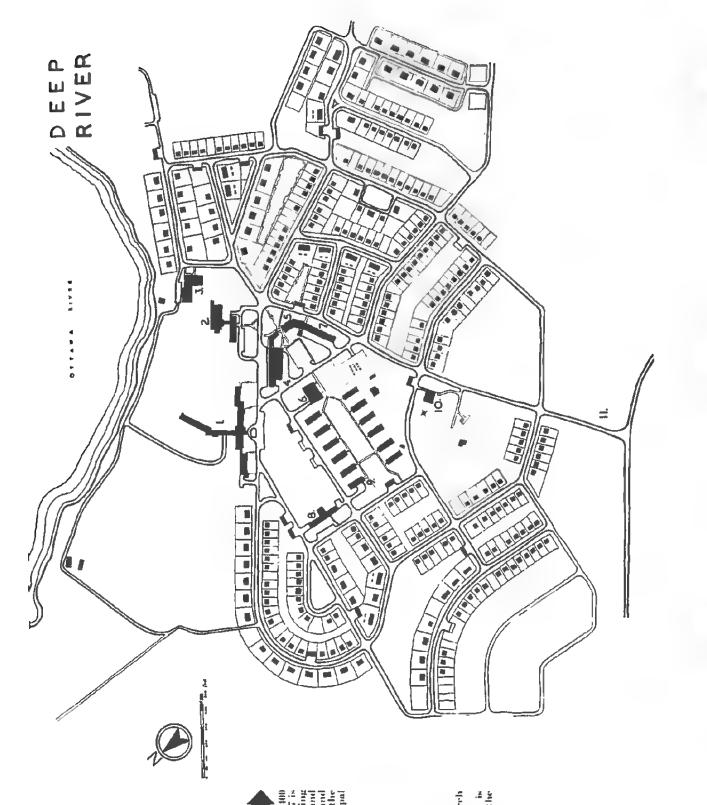
The breadwinners of the new community are of three occupational groups: salaried people with a wide range of scientific skills; hourly-paid assistants in the operation and maintenance of the nuclear fission Plant; and those engaged in maintaining and servicing the town itself. A reflection of the novelty of their work is the fact that the average age of the townspeople is under 30. The senior members of each group are nearly all married men; only about one-quarter of the remainder are unmarried. Very few of the workers live outside the town. The income levels are probably slightly higher than in most single-industry communities.

There are at present about 360 workers living in rented dwellings with their families. A similar number live in the staff hotel and dormitories provided. The total is thus about 1800 people. To meet the variety of family needs and tastes, and yet to attain the required speed of construction, a dozen types of standard one-family houses and small apartments were adopted for the town. These houses had proved themselves in temporary and permanent munitions workers' housing projects; indeed many of them were moved to Deep River from such projects (see photo). Most of them were occupied within a year after the town-site had been chosen. The rentals are very low.

The Plan

The planners of Deep River were thus faced with the problem of developing a new area, and siting nearly 400 buildings-mostly small, and of standardized appearance—upon that area. And they were given little time to solve the problem. One of them says: "Decisions had to be made in the path of the bulldozer." They decided upon ample lots (averaging 50 by 120 feet); with the other requirements this meant immediate development of about 150 acres. The small meadow on the river bank where Indians had camped was chosen as the village common. This would plainly be the focus of the new town. It was clear that the main entrance road from the highway should lead down to this area. The planners chose to place the public buildings (school, community centre, shopping centre, town office and staff hotel) around the ledge that bounds this clearing. Special efforts were made during the construction period to protect natural growth on the town common. (See plan on page 5). The street pattern was made to take advantage of the terraces upon the surrounding slopes, and partly to use roadways already cleared.

To each street they allotted, for both social and visual variety, a mixture of house types. No hedges or other marking of front yard boundaries were permitted. Houses were placed to leave some larger trees standing in their rear yards. The houses are helped to look like



Plan of Deep River at about 400 feet to the fuel. Highway No. 17 is at the bottom of the plan, leading morthwest (left) to North Bay, and southerst (left) to North Bay, and southerst (left) to Pemberke and Ottawa, The Ottawa River is at the top of the plan. The principal Schollings are as follows:

I. Nuff Hotel.

S. Cammunity Centre.

J. Frimary School.

S. Town Office.

G. Gafteria.

Hospital.

G. Town Garage.

M. Hospital.

Hospital.

Hospital.

M. Heating Plant.

H. Roman Catholic Church and School Site.

The Atomic Energy Plant is about 12 miles by road to the southerst.

related groups by deliberately leaving an occasional house-lot vacant. The use of heavy mechanical gear for speedy site-clearing led to considerable destruction of tree cover, which had been counted upon to screen the town into several clusters of buildings grouped around small enclosed clearings. In the event, the machinery used to grade roadways, dig pipe-trenches and make building excavations obliterated the intended sense of verdant enclosure; where there was to be a street, the machines cut a swathe nearly 250 feet wide.

The order of construction was governed by progress in preparing the site, by the accommodation needs of the construction crew, and by the availability of materials for the houses. Thus the central barracks were built first, then houses brought in large panels from other projects, and finally those buildings requiring a high proportion of work on the site. The most desirable lots were thought to be near the shore to the west of the staff house; in this "district" the houses of senior members of the community were intended—but bad drainage altered the scheme.

Services

The central group of shops have at their middle a bank and a post office. Other large units in the group include a general store and a grocery store—both operated by large Canadian chains. The shopping centre contains nearly 20,000 square feet of floor space, of which the above four units occupy three-quarters. Other major units are the community caterer (operating staff dining rooms) and the drugstore. Tailor, barber, beauty shop and shoe repair are also located in the shopping centre. A furniture store operates in one of the buildings left standing in another part of the town by the building contractor. Watch and radio repairs are done by townsmen in their own homes, and one of them also looks after telegrams.

Milk, bread and laundry services are supplied from appoining towns. Plant personnel may take their meals in a restmirant with table service. This place, like the cafeteria where hourly-paid maintenance and service people may eat, is operated by a nationally known catering firm. Most of the shops and services found difficulty at first (as had the planners before them!) in anticipating the needs of the people of the new town.

The roads total nearly five miles in length. They are all lighted at night, the power being distributed in overhead wires. The roads are still all gravel surfaced. Sidewalks are provided only in the block fronting the shopping centre. There are over 160 motor vehicles in the town, about two-thirds of them being private cars. Traffic being entirely local, the drivers give a refreshing rightof-way to pedestrians. The town and Plant include garage spaces for the whole number of vehicles, as well as nearly 300,000 square feet of public parking space in the central area. The provision for parked cars in front of the shop windows has been criticized. No mechanical traffic control is required, beyond designation of some major thoroughfares by "Through Street" signs. Movement of workers to the plant, and of high school students and shoppers to an adjoining larger town (Pembroke) is almost entirely by busses, operated



by the Research Council. There is little trucking, other than the coal supply and snow removal in winter.

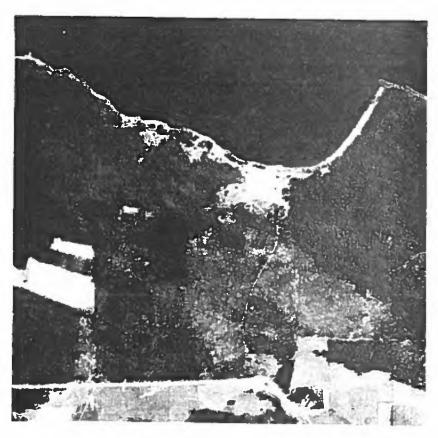
Deep River has over sixty miles of power lines, nine miles of water mains, eight miles of sewers, and a central heating plant for the communal buildings. Water is taken from the Ottawa River above the town, and chlorinated; the sewage is treated, and safe effluents flow out into the river well below the settled area. The sewage plant is adequate for three times the present population. There are frequent fire-hydrants and alarm boxes throughout the town, sprinklers in some of the public buildings, and a 50,000 gallon water storage tank on the highest ground on the site. A fire truck is kept in the town garage. Law and order are looked after by a police force of three men; but their authority in the absence of magistrates and a court must depend upon disciplinary action by the employing administration. Houses and common buildings are kept in good order by a staff of nearly eighty workmen.

Institutions

Deep River has a five-room elementary school, staffed by six teachers. It was built by the project but is maintained with aid from the Ontario government. The youth and vitality of the population was apparently underestimated-for the school is already overcrowded. (Out of a population of about 1,800, nearly one-tenth are between 5 and 12 years old. The pre-school group is much larger.) The Roman Catholic Commission is now constructing a separate school on the grounds of the Wylie church, adjacent to the village, which will serve the Roman Catholic children from the village as well as those from the surrounding district. The original village school is built on the central open space, and has its own playing fields. It is administered under a Board of three persons, appointed by the Ontario Minister of Education. The library in the community centre is administered by an elected board.

Upwards of thirty secondary school pupils travel daily by bus to the nearest High School, in Pembroke. The bus schedule affords them almost no chance to engage in after-class activities with their Pembroke schoolmates.

In this isolated and unincorporated dormitory settlement, the most active community groupings centre upon various kinds of recreation. The largest group is the alley-bowling league, which includes nearly half the adult population. Skiing, softball, skating, boating, swimming and termis groups are popular in that order;



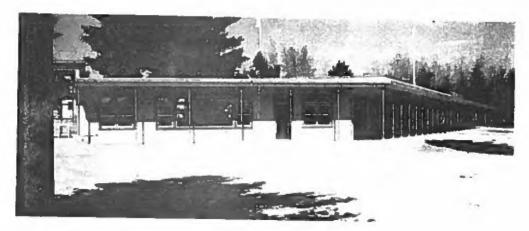
## 1944

Acrial view of Deep River townsite before construction was begun. The beach along the river, the cluster of buildings at the curve of the highway, and the winding trail leading down through pastureland and tree-covered slopes to what is now the Town Common are all evident. (Photo: RCAF)

1946

The Shopping Centre on the south side of the principal street, with wide parking area and canopied walk fronting all the shops.

Workers leaving the bus that brought them from the Plant, Beyond, on the north side of the main street and west of the Shopping Centre, is the Staff Hotel and Dining Room. It is on the slope marking the south and west sides of the Town Common. (Photos: NFB)





the last-named sport engages about fifty regular players. The administration has built a community centre in the common area, with assembly halls, bowling-alleys, activity rooms and kitchen; outdoor facilities adjoin it. (See photo.) There is a professional Director of Recreation, who is advised by a representative Steering Committee. The town movies (three nights weekly) are commercially supplied and operated.

Substantial interest groups also include church societies; a Canadian Legion branch; troops of Boy Scouts, Girl Guides and Wolf Cubs; camera, chess. dramatic, reading, music and science clubs; short-wave radio enthusiasts; a child study group; a teen-age club, etc. Most of these use the community centre. Their fees appear to be unusually low for such groups. They can arrange refreshments either in the centre or from a canteen on the wide sand beach.

The health of the workers at the nuclear fission project was a major concern. A staff of five doctors, two dentists, fifteen nurses and a number of technicians serves both the Plant and a hospital in the town. But again, as in the schools, the age-composition of the population was miscalculated, with the result that the obstetric ward of the hospital is quite inadequate.

Protestant religious services of non-sectarian character are held in the community centre. The Roman Catholic parish church is located on the highway just outside the town. Separate Church of England services are held. There is a non-sectarian Sunday School.

A citizens' council was created among the scientists before the town was built, apparently motivated by apprehension about the standard of facilities to be provided. Efforts were made to continue this committee in altered form as the Town Council. The community's weekly paper supported the idea, and elections were held. General interest in the Council was disappointingly slight-perhaps because this "town council" would have neither authority nor funds. Its disappearance leaves the Recreation Steering Committee as the most active element of self-government in the community. The recreational and religious groupings thus serve to integrate the community, which by its nature is divided into sub-groups, as between familylife and dormitory-eating-hall life. Normal machinery of local government, with its attendant emphasis on full civic responsibility for community affairs, might strengthen the bonds of integration.

#### Effect on Adjoining Areas

Deep River was not conceived as part of a regional plan; and its peculiar purpose and constitution prevented its fitting wholly into the pattern intended in provincial planning legislation. Nonetheless, the arrival of hundreds of urban families—with incomes to spend and needs to satisfy—was bound to cause a readjustment of the surrounding, relatively simple economy. On the railway, a flag stop has become a busy little station. The highway terminus of the Deep

River Road-the nearest point for the growth of uncontrolled, marginal enterprises—is already becoming the dreary string of gas stations, tourist huts and hotdog shanties regrettably familiar at other rural road junctions. The Roman Catholic families share an elementary school with others outside Deep River. Pembroke High School serves many other rural areas besides Deep River, and recently in recognition of this the County Council has taken over the Pembroke School and has formed a school area, serving the people within 30 miles of Pembroke on all sides. Pembroke shops experience every Thursday a mass of new demands, some of them more to be expected in a university town than in a railway-and-rural-market town. On the other hand, some of the new Deep River shopkeepers are pleased to find that as much as 25% of their business is quite independent of pay cheques from the government Plant. A few families whose heads are employed in the Plant have built homesteads outside the Deep River community. Also, while organized sports like tennis and baseball are provided for in the town, the hikers, skiers and hunters of the community roam further afield.

The planners, foreseeing some of these regional effects, recommended at an early stage that surrounding municipalities, the provincial and federal governments and the railway company should co-operate to apply a regional plan. The Ontario Planning and Development Act which provides for the creation of a "planning area" has been in force nearly two years. Plainly it should be invoked in the Deep River area.

#### Conclusion

Thus a new town, to function as its planners hope, needs sensitive attention to many factors beyond the construction drawings. In the plan itself, the location of physical facilities can materially help to weld the new community—for instance, by providing a single place for communal eating. The planners of new towns need in advance the fullest possible information as to intended administrative arrangements—as for instance, whether there will be a single or duplicate elementary school systems, and what will be the form of local government.

We said at the outset that this community was a special case. Most of our readers are concerned with alterations and additions to an existing town, rather than with the creation of a wholly new one. Yet even in designing alterations and additions, there is ample opportunity to apply lessons learned from a laboratory model; a naval architect refitting an old vessel does not spurn whatever has been proven at small scale in a testing basin. Deep River is on the whole successful—certainly far more so than it would have been if less care had been taken to plan it. Its inhabitants are given community advantages and facilities because they are engaged in work of national importance. Let's see if we can build similar features into all our communities—for their own sakes.





The test of democratic planning is whether the people will fight for it—not simply whether they will accept it or approve it or join in it—but whether they will fight for it.

-DAYID LILIENTHAL

Community planning is too big a subject for a little leaflet. It is the business of re-arranging gradually the use of things now built here, and arranging intelligently for the structures we know will be built in the near future, so that life in the community may be richer for all.

Obviously, the re-sorting of any town will take time. So did the clearing of the forest, or the building of the railways. But our forefathers did not fail on that score. Now it is our turn in industrial Canada to locate houses and schools and parks and streets so they can do better jobs for us and for the future.

Our timetable of community planning achievement will be governed by two rates:

- 1. How fast is building going on in any case?
- How fast are we reaching clear decisions as to the community scene we want to attain by this building?

The building of houses, shops, schools and factories in Canada is going ahead this year — and to keep our full employment pledge will go on for years — at full steam. Our communities are rapidly changing their faces. What about the new looks they are getting? Is civic thinking on these matters going ahead as fast as walls are going up, and drains are going down? Is our community being made over to measure? Community planning is canny shopping for space, civic-wise. It is seeing-what-we-pay-for as a community.

There are five main stages in community planning:

- Taking stock of what we now have (civic officials in their files probably have most of the items);
- 2. Finding out what other communities are providing for themselves:
- Listing our greatest needs, as indicated by our stock-taking and by experience elsewhere;
- 4. Setting down a detailed description of the community as we see it can be arranged in the next few years—with less detailed notes for future reference; also we'll specify the steps to be taken by public and private agencies to get the community where it wants to go. (This is what everybody recognizes as 'planning');
- Keeping the town hall and the proper provincial and federal authorities posted at every step as to the community purposes we have elected and appointed them to serve.

Some work at every stage we must entrust to full-time experts. They are the first to insist, however, that crucial choices for the future of our community must be taken by us citizens — now.

COMMUNITY PLANKING ASSOCIATION OF CANADA, 56 Lyon Street, Ottowa, Canada.